

C L A I M S

1. Process for the fabricating an electronic integrated
5 circuit comprising the steps consisting in:

- a) Forming, on a substrate (100) of the circuit, of which a part (100; 103) is composed of absorbing material, a portion (1) made of a sacrificial material coming into contact with one face (F) of the part of the substrate composed of absorbing material;
- 10 b) forming a rigid portion (3, 4) in fixed contact with the substrate (100), on one side of the portion of sacrificial material (1) opposite to said face (F) of the part of the substrate composed of absorbing material; and
- 15 c) heating the circuit in order to create a volume (V) substantially empty of material by absorption of the sacrificial material into the part of the substrate composed of absorbing material (100; 103),

20 the process being characterized in that the sacrificial material has a melting point in excess of 900°C and in that the sacrificial material is chosen so as not to cause any material alteration of parts of the circuit in contact with the portion of sacrificial material prior to the step c).

25 30 3. Process according to Claim 1, wherein the sacrificial material includes cobalt, nickel, titanium, tantalum, tungsten, molybdenum, silver, gold, iron and/or chromium.

3. Process according to Claim 1, wherein the absorbing material includes silicon, germanium, phosphorus, arsenic and/or antimony.

4. Process according to Claim 1, wherein the portion of 5 sacrificial material (1) is formed in a cavity (C) below the level of a surface (S) of the substrate (100).

5. Process according to Claim 1, wherein, at the step 10 c), the absorption of the sacrificial material into the part of the substrate composed of absorbing material (100; 103) results from a chemical reaction between the sacrificial material and the absorbing material.

6. Process according to Claim 1, wherein said volume 15 substantially empty of material (V) has a large cross section substantially parallel to a surface of the substrate (S).

7. Process according to Claim 1, furthermore comprising, between the steps a) and b), a formation of an intermediate layer (2), said intermediate layer 20 being located, when the step b) is complete, between the portion of sacrificial material (1) and the rigid portion (3, 4).

8. Process according to Claim 1, wherein the volume (V) 25 substantially empty of material is situated between two electrodes (3, 5) of a capacitor belonging to said circuit.

9. Process according to Claim 8, wherein the rigid portion comprises a first electrode (3) of the capacitor.

10. Process according to Claim 8, wherein the part of
the substrate composed of absorbing material (100;
103), after absorbing the sacrificial material in the
step c), comprises a second electrode of the capacitor
5 (5).

11. Process according to Claim 8, wherein at least one
of the two electrodes (3, 5) has a main surface (P)
substantially parallel to a substrate surface (S).

12. Electronic integrated circuit fabricated using a
10 process according to Claim 1.

13. Electronic integrated circuit according to Claim
12, wherein the volume (V) substantially empty of
material is located within a layer of metallization
level (M1) of said circuit.